

Notice of Allowability

Application No.

09/927,675

Examiner

Chris C. Chu

Applicant(s)

PERRY, GUY

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/8/05.
2. ☒ The allowed claim(s) is/are 1, 2, 4 - 23, 26 - 28, 30 - 34, 50 - 55, 57 - 63 and 69 - 78.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>11/8/05</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Kristine M. Strodthoff on November 8, 2005.

The application has been amended as follows:

In the claim:

- a) Claim 65 is cancelled.
- b) In claim 70, line 7, after "circuitry, and" delete [t].
- c) In claim 76, line 7, after "wafer, and" delete [a] and insert --the--.
- d) In claim 76, line 9, after "circuit, and" delete [a] and insert --the--.
- e) In claim 77, line 7, after "die, and" delete [a] and insert --the--.
- f) In claim 77, line 9, after "circuit, and" delete [a] and insert --the--.
- g) In claim 78, line 9, after "circuit, and" delete [a] and insert --the--.

REASONS FOR ALLOWANCE

3. Claims 1, 2, 4 – 23, 26 – 28, 30 – 34, 50 – 55, 57 – 63 and 69 – 78 are allowed.

Art Unit: 2815

4. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest, either singularly or in combination, at least a bond pad structure in a semiconductor die comprising a first bond pad and a second bond pad comprising a plurality of lower metal layers and an upper metal layer with at least one of the lower metal layers of one of the bond pads extending underneath the upper metal layer of the other of the bond pads; wherein the first bond pads is operable to receive and supply both a test mode signal and an operational mode signal to a function circuitry and the second bond pad is operable to receive and supply only an operational mode signal and not a test mode signal to the function circuitry. Furthermore, applicant specifically pointed in his remark that the claims recite limitations that structurally define the bond pads of Applicant's devices and do not merely recite *intended use* or *functional language*, and these limitations differentiate the claimed structures from Preslar such as the claims require a bond pad that is structured so that it will operate to receive and supply (a) a test mode signal to the function circuitry to enable or initiate the test mode, and (b) an operational mode signal to the function circuitry to initiate an operational mode upon completion of the test mode and connection of the first and second bond pads together. Preslar et al. (U. S. Pat. No. 5,900,643) teaches a bond pad structure in a semiconductor die comprising a first bond pad and a second bond pad comprising a lower metal layer and an upper metal layer with at least one of the lower metal layers of one of the bond pads extending underneath the upper metal layer of the other of the bond pads; wherein the first bond pads is operable to receive and supply both a test mode signal and an operational mode signal to a function circuitry. Also, Ellis-Monaghan et al. (U. S. Pat. No. 6,495,917) teaches a bond pad structure in a semiconductor die comprising a first bond pad and a second bond pad comprising a

Art Unit: 2815

plurality of lower metal layers and an upper metal layer. However, Preslar et al. and Ellis-Monaghan et al. do not teach at least the second bond pad being operable to receive and supply only an operational mode signal and not a test mode signal to the function circuitry as set forth in newly amended claims 1, 9, 11 – 13, 18, 22, 28, 32, 50, 58, 60 – 62 and 69 – 78.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris C. Chu whose telephone number is 571-272-1724. The examiner can normally be reached on 11:30 - 8:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Kenneth Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

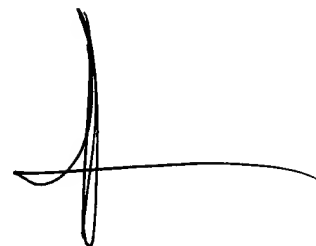
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Art Unit: 2815

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chris C. Chu
Examiner
Art Unit 2815

c.c.
Friday, December 30, 2005

A handwritten signature in black ink, consisting of a vertical line with a loop at the top and a horizontal line extending to the right.

KENNETH PARKER
SUPERVISORY PATENT EXAMINER